UNITED STATES PATENT AND TRADEMARK OFFICE

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10/712,445	11/13/2003	Samuel L. Karns	BOC9-2003-0105-US1 (1082-	8692

7590 04/06/2007	EXAMINER
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ART UNIT	PAPER NUMBER
2626	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/712,445	KARNS, SAMUEL L.
	Examiner	Art Unit	
	Joel Stoffregen	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>13 November 2003</u>.

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>13 November 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the original application filed on 11/13/2003.

2.   Claims 1-20 are currently pending in this application. Claims 1, 10, and 19 are

independent claims.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   **Claims 1, 4-6, 10, 13-15 and 19** are rejected under 35 U.S.C. 102(b) as being

anticipated by ESQUERRA et al. ("Design of a Phonetic Corpus for Speech Recognition

in Catalan").

5.   Regarding **claim 1**, ESQUERRA teaches a method for developing a script

("corpus of sentences", section 3.1, paragraph 1) to be used with speech recognition

systems ("for speech recognition", abstract), said method comprising the steps of:

reading language phoneme data ("reference corpus", section 2, paragraph 1) for

a given language, the language phoneme data having a plurality of phonemes occurring

in the given language ("corpus was converted into phonemes using a transcription

program", section 2.1, paragraph 1);

reading script data ("sentences between 10 and 40 letters were selected",

section 3.1, paragraph 1) having a set of one or more phonemes ("N is the number of

phones in a sentence", section 3.1, paragraph 1);

counting each phoneme in the script data to produce a count data for each of the

plurality of phonemes in the language phoneme data ("units were counted to know

whether they reach the minimum number of required repetitions", section 3.1, paragraph

1, where "units" refer to phonemes);

generating a set of statistical data ("coverage measures", section 4, paragraph 5)

derived from the count data, the set of statistical data including one or more metrics of

the extent to which the phonemes in the language phoneme data are included in the

script data (see Table 3, BD3-E is the corpus of sentences used for training, REF is the

reference corpus).

6.   Regarding **claim 4**, ESQUERRA further teaches that the set of statistical data

includes:

an occurrence data for each of the phonemes in the phoneme data, each

occurrence data indicating a number of occurrences of the phoneme in the script data

("units were counted to know whether they reach the minimum number of required

repetitions", section 3.1, paragraph 1, where "units" refer to phonemes).

7.   Regarding **claim 5**, ESQUERRA further teaches that the set of statistical data

includes:

a ratio data, each ratio data being the number of phonemes in the script data as

a percentage of the number of the plurality of phonemes in the phoneme data (see

Table 3, BD3-E is the corpus of sentences used for training, REF is the reference

corpus).

8.   Regarding **claim 6**, ESQUERRA further teaches that the set of statistical data

includes:

a missing phoneme data, each missing phoneme data being a list of the

phonemes in the language phoneme data not included in the script data (see section

3.1, paragraph 2, new sentences are created containing missing allophones, so a list of

the missing allophones is inherent).

9.   Regarding **claim 10**, ESQUERRA teaches a machine readable storage having

stored thereon a computer program for developing a script ("corpus of sentences",

section 3.1, paragraph 1) to be used with speech recognition systems ("for speech

recognition", abstract), said computer program comprising a routine set of instructions

for causing the machine to perform the steps of:

reading language phoneme data ("reference corpus", section 2, paragraph 1) for

a given language, the language phoneme data having a plurality of phonemes occurring

in the given language ("corpus was converted into phonemes using a transcription

program", section 2.1, paragraph 1);

reading script data ("sentences between 10 and 40 letters were selected",

section 3.1, paragraph 1) having a set of one or more phonemes ("N is the number of

phones in a sentence", section 3.1, paragraph 1);

counting each phoneme in the script data to produce a count data for each of the

plurality of phonemes in the language phoneme data ("units were counted to know

whether they reach the minimum number of required repetitions", section 3.1, paragraph

1, where "units" refer to phonemes);

generating a set of statistical data ("coverage measures", section 4, paragraph 5)

derived from the count data, the set of statistical data including one or more metrics of

the extent to which the phonemes in the language phoneme data are included in the

script data (see Table 3, BD3-E is the corpus of sentences used for training, REF is the

reference corpus).

10.   Regarding **claim 13**, ESQUERRA further teaches that the set of statistical data

includes:

an occurrence data for each of the phonemes in the phoneme data, each

occurrence data indicating a number of occurrences of the phoneme in the script data

("units were counted to know whether they reach the minimum number of required

repetitions", section 3.1, paragraph 1, where "units" refer to phonemes).

11.   Regarding **claim 14**, ESQUERRA further teaches that the set of statistical data

includes:

a ratio data, each ratio data being the number of phonemes in the script data as

a percentage of the number of the plurality of phonemes in the phoneme data (see

Table 3, BD3-E is the corpus of sentences used for training, REF is the reference

corpus).

12.   Regarding **claim 15**, ESQUERRA further teaches that the set of statistical data

includes:

a missing phoneme data, each missing phoneme data being a list of the

phonemes in the language phoneme data not included in the script data (see section

3.1, paragraph 2, new sentences are created containing missing allophones, so a list of

the missing allophones is inherent).

13.   Regarding **claim 19**, ESQUERRA teaches a script development tool ("design of

a corpus for speech recognition", abstract) configured for coupling to a script ("corpus of

sentences", section 3.1, paragraph 1) having a set of one or more phonemes ("N is the

number of phones in a sentence", section 3.1, paragraph 1) and programmed to both

count each phoneme in said script to produce count data for each phoneme in a

selected language ("units were counted to know whether they reach the minimum

number of required repetitions", section 3.1, paragraph 1, where "units" refer to

phonemes), and also to generate a set of statistical data ("coverage measures", section

4, paragraph 5) derived from said count data, the set of statistical data comprising one

or more metrics of the extent to which each phoneme in said selected language is

included in said script (see Table 3, BD3-E is the corpus of sentences used for training,

REF is the reference corpus).

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the.
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

15.   **Claims 2, 3, 7, 8, 11, 12, 16, 17, and 20** are rejected under 35 U.S.C. 103(a) as

being unpatentable over ESQUERRA et al. ("Design of a Phonetic Corpus for Speech

Recognition in Catalan") in view of GOULD (Patent No.: US 5,794,189).

16.   Regarding **claim 2**, ESQUERRA teaches that the script data ("corpus of

sentences", section 3.1, paragraph 1) includes one or more words ("sentences between

10 and 40 letters were selected", section 3.1, paragraph 1), each word having one or

more of the set of one or more phonemes ("N is the number of phones in a sentence",

section 3.1, paragraph 1).

However, ESQUERRA does not disclose reading vocabulary data, comparing

words to vocabulary data, or returning an error message.

In the same field of speech recognition, GOULD teaches:

reading vocabulary data having one or more words ("dictionary", column 15, line

15);

comparing each word in the script data with the vocabulary data ("for each word

in the buffer, look the word up in the dictionary", column 15, lines 14-15); and

returning an error message if a word in the script data is not included in the

vocabulary data ("if the word is not in the dictionary... display an 'unknown word' error

to the user", column 15, lines 16-20).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to check the words in the corpus of sentences

provided by ESQUERRA in the manner of GOULD in order to ensure that a speech

model can be obtained for each word (see GOULD, column 15, lines 14-20).

Regarding **claim 3**, ESQUERRA teaches counting each phoneme in each word

in the script data ("units were counted to know whether they reach the minimum number

of required repetitions", section 3.1, paragraph 1, where "units" refer to phonemes).

However, ESQUERRA does not disclose comparing words to vocabulary data,

returning an error message, or counting the phonemes if the word is in the vocabulary

data.

In the same field of speech recognition, ESQUERRA in view of GOULD teach:

comparing each word in the script data with the vocabulary data ("for each word

in the buffer, look the word up in the dictionary", GOULD, column 15, lines 14-15);

returning an error message if a word in the script data is not included in the

vocabulary data ("if the word is not in the dictionary... display an 'unknown word' error

to the user", GOULD, column 15, lines 16-20); and

counting each phoneme in each word in the script data ("units were counted to

know whether they reach the minimum number of required repetitions", ESQUERRA,

section 3.1, paragraph 1) if a word in the script data is included in the vocabulary data

("remember these words as target words", column 15, line 21, where a word marked as

a target word has further operations performed on it).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to check the words in the corpus of sentences

provided by ESQUERRA in the manner of GOULD in order to ensure that a speech

model can be obtained for each word (see GOULD, column 15, lines 14-20).

17.   Regarding **claim 7**, ESQUERRA teaches that the script data ("corpus of

sentences", section 3.1, paragraph 1) includes one or more words ("sentences between

10 and 40 letters were selected", section 3.1, paragraph 1), and further comprising the

steps of:

reading an additional word having one or more phonemes ("new sentences had

to be written containing those allophones", section 3.1, paragraph 2); and

adding an additional word to the script data ("new sentences were added to the

corpus", section 3.1, paragraph 4).

However ESQUERRA does not disclose reading a vocabulary data, comparing the additional word to the vocabulary data, or adding the additional word if the additional word is included in the vocabulary data.

In the same field of speech recognition, ESQUERRA in view of GOULD teach:

reading a vocabulary data having one or more words ("dictionary", GOULD, column 15, line 15);

comparing the additional word with the vocabulary data ("for each word in the buffer, look the word up in the dictionary", GOULD, column 15, lines 14-15);

adding the additional word to the script data ("new sentences were added to the corpus", section 3.1, paragraph 4) if the additional word is included in the vocabulary data ("remember these words as target words", column 15, line 21, where a word marked as a target word has further operations performed on it).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to check the words in the new sentence provided by ESQUERRA in the manner of GOULD in order to ensure that a speech model can be obtained for each word (see GOULD, column 15, lines 14-20).

18.   Regarding **claim 8**, ESQUERRA teaches that the script data ("corpus of sentences", section 3.1, paragraph 1) includes one or more words ("sentences between 10 and 40 letters were selected", section 3.1, paragraph 1), and further comprising the step of:

reading an additional word having one or more phonemes ("new sentences had

to be written containing those allophones", section 3.1, paragraph 2);

However ESQUERRA does not disclose reading a vocabulary data, comparing

the additional word with the script data, or removing the additional word from the script

data.

In the same field of speech recognition, GOULD teaches:

reading a vocabulary data having one or more words ("dictionary", column 15,

line 15);

comparing the additional word with the script data ("if the text on the screen

starting with the current word matches the indicated words, set the selection to text on

the screen just compared against", column 13, lines 35-38, where "text on the screen" is

the additional word, and the "indicated words" is the script data);

removing the additional word from the script data if the additional word is

included in the script data ("if words are selected on the screen, delete the words which

are selected", column 13, lines 48-49, where the word "selected on the screen" is the

additional word that was compared with the script data).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to delete the words in the new sentence provided by

ESQUERRA in the manner of GOULD in order to filter out words which may be

problematic for training (see PITRELLI et al., section 2.1, listed on form PTO-892).

19.   Regarding **claim 11**, ESQUERRA teaches that the script data ("corpus of sentences", section 3.1, paragraph 1) includes one or more words ("sentences between 10 and 40 letters were selected", section 3.1, paragraph 1), each word having one or more of the set of one or more phonemes ("N is the number of phones in a sentence", section 3.1, paragraph 1).

However, ESQUERRA does not disclose reading vocabulary data, comparing words to vocabulary data, or returning an error message.

In the same field of speech recognition, GOULD teaches:

reading vocabulary data having one or more words ("dictionary", column 15, line 15);

comparing each word in the script data with the vocabulary data ("for each word in the buffer, look the word up in the dictionary", column 15, lines 14-15); and

returning an error message if a word in the script data is not included in the vocabulary data ("if the word is not in the dictionary... display an 'unknown word' error to the user", column 15, lines 16-20).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to check the words in the corpus of sentences provided by ESQUERRA in the manner of GOULD in order to ensure that a speech model can be obtained for each word (see GOULD, column 15, lines 14-20).

Regarding **claim 12**, ESQUERRA teaches counting each phoneme in each word in the script data ("units were counted to know whether they reach the minimum number of required repetitions", section 3.1, paragraph 1, where "units" refer to phonemes).

However, ESQUERRA does not disclose comparing words to vocabulary data, returning an error message, or counting the phonemes if the word is in the vocabulary data.

In the same field of speech recognition, ESQUERRA in view of GOULD teach:

comparing each word in the script data with the vocabulary data ("for each word in the buffer, look the word up in the dictionary", GOULD, column 15, lines 14-15);

returning an error message if a word in the script data is not included in the vocabulary data ("if the word is not in the dictionary... display an 'unknown word' error to the user", GOULD, column 15, lines 16-20); and

counting each phoneme in each word in the script data ("units were counted to know whether they reach the minimum number of required repetitions", ESQUERRA, section 3.1, paragraph 1) if a word in the script data is included in the vocabulary data ("remember these words as target words", column 15, line 21, where a word marked as a target word has further operations performed on it).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to check the words in the corpus of sentences provided by ESQUERRA in the manner of GOULD in order to ensure that a speech model can be obtained for each word (see GOULD, column 15, lines 14-20).

20.   Regarding **claim 16**, ESQUERRA teaches that the script data ("corpus of

sentences", section 3.1, paragraph 1) includes one or more words ("sentences between

10 and 40 letters were selected", section 3.1, paragraph 1), and further comprising the

steps of:

reading an additional word having one or more phonemes ("new sentences had

to be written containing those allophones", section 3.1, paragraph 2); and

adding an additional word to the script data ("new sentences were added to the

corpus", section 3.1, paragraph 4).

However ESQUERRA does not disclose reading a vocabulary data, comparing

the additional word to the vocabulary data, or adding the additional word if the additional

word is included in the vocabulary data.

In the same field of speech recognition, ESQUERRA in view of GOULD teach:

reading a vocabulary data having one or more words ("dictionary", GOULD,

column 15, line 15);

comparing the additional word with the vocabulary data ("for each word in the

buffer, look the word up in the dictionary", GOULD, column 15, lines 14-15);

adding the additional word to the script data ("new sentences were added to the.

corpus", ESQUERRA, section 3.1, paragraph 4) if the additional word is included in the

vocabulary data ("remember these words as target words", column 15, line 21, where a

word marked as a target word has further operations performed on it).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to check the words in the new sentence provided by

ESQUERRA in the manner of GOULD in order to ensure that a speech model can be

obtained for each word (see GOULD, column 15, lines 14-20).

21.   Regarding **claim 17**, ESQUERRA teaches that the script data ("corpus of

sentences", section 3.1, paragraph 1) includes one or more words ("sentences between

10 and 40 letters were selected", section 3.1, paragraph 1), and further comprising the

step of:

      reading an additional word having one or more phonemes ("new sentences had

to be written containing those allophones", section 3.1, paragraph 2);

      However ESQUERRA does not disclose reading a vocabulary data, comparing

the additional word with the script data, or removing the additional word from the script

data.

      In the same field of speech recognition, GOULD teaches:

      reading a vocabulary data having one or more words ("dictionary", column 15,

line 15);

      comparing the additional word with the script data ("if the text on the screen

starting with the current word matches the indicated words, set the selection to text on

the screen just compared against", column 13, lines 35-38, where "text on the screen" is

the additional word, and the "indicated words" is the script data);

      removing the additional word from the script data if the additional word is

included in the script data ("if words are selected on the screen, delete the words which

are selected", column 13, lines 48-49, where the word "selected on the screen" is the additional word that was compared with the script data).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to delete the words in the new sentence provided by ESQUERRA in the manner of GOULD in order to filter out words which may be problematic for training (see PITRELLI et al., section 2.1, listed on form PTO-892).

22.   Regarding **claim 20**, ESQUERRA teaches that the script ("corpus of sentences", section 3.1, paragraph 1) includes one or more words ("sentences between 10 and 40 letters were selected", section 3.1, paragraph 1), and wherein the tool is further programmed to read an additional word having one or more phonemes ("new sentences had to be written containing those allophones", section 3.1, paragraph 2), and add the additional word to the script data ("new sentences were added to the corpus", section 3.1, paragraph 4).

However ESQUERRA does not disclose a tool that is programmed to read a vocabulary data having one or more words, and is also programmed to compare the additional word with the vocabulary data and add the additional word to the script data if the additional word is included in the vocabulary data, and is also programmed to compare the additional word with the script and remove the additional word from the script data if the additional word is included in the script data.

In the same field of speech recognition, ESQUERRA in view of GOULD teach a tool that is programmed to read a vocabulary data having one or more words

("dictionary", GOULD, column 15, line 15), and is also programmed to compare the

additional word with the vocabulary data ("for each word in the buffer, look the word up

in the dictionary", GOULD, column 15, lines 14-15) and add the additional word to the

script data ("new sentences were added to the corpus", ESQUERRA, section 3.1,

paragraph 4) if the additional word is included in the vocabulary data ("remember these

words as target words", column 15, line 21, where a word marked as a target word has

further operations performed on it), and is also programmed to compare the additional

word with the script ("if the text on the screen starting with the current word matches the

indicated words, set the selection to text on the screen just compared against", GOULD,

column 13, lines 35-38, where "text on the screen" is the additional word, and the

"indicated words" is the script data) and remove the additional word from the script data

if the additional word is included in the script data ("if words are selected on the screen,

delete the words which are selected", GOULD, column 13, lines 48-49, where the word

"selected on the screen" is the additional word that was compared with the script data).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to check the words in the new sentence provided by

ESQUERRA in the manner of GOULD in order to ensure that a speech model can be

obtained for each word (see GOULD, column 15, lines 14-20) and to filter out words

which may be problematic for training (see PITRELLI et al., section 2.1, listed on form

PTO-892).

23.   **Claims 9 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable

over ESQUERRA et al. ("Design of a Phonetic Corpus for Speech Recognition in

Catalan") in view of Department of Psychology, University of Essex ("Phoneme

Search"), hereinafter referred to as ESSEX.

24.   Regarding **claim 9**, ESQUERRA teaches that the script data ("corpus of

sentences", section 3.1, paragraph 1) includes one or more words ("sentences between

10 and 40 letters were selected", section 3.1, paragraph 1).

However, ESQUERRA does not disclose reading a vocabulary data, reading a

set of one or more desired phonemes, searching the vocabulary data for one or more

words having the set of one or more desired phonemes, or generating a report of one or

more additional words having the set of one or more desired phonemes.

In the same field of phonetic evaluation, ESSEX teaches:

reading a vocabulary data having one or more words ("word database", see

header);

reading a set of one or more desired phonemes (three different phonemes may

be selected with the pull-down menus);

searching the vocabulary data for one or more words having the set of one or

more desired phonemes ("search for words which contain the following phonemes");

generating a report of one or more additional words having the set of one or

more desired phonemes ("generates a list of words"), if the one or more additional

words having the set of one or more desired phonemes are included in the vocabulary data (see "Phoneme Search Results").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made use the phoneme search engine of ESSEX with the corpus design of ESQUERRA in order to find words containing "missing units" (ESSEX, section 5, paragraph 1).

25.   Regarding **claim 18**, ESQUERRA teaches that the script data ("corpus of sentences", section 3.1, paragraph 1) includes one or more words ("sentences between 10 and 40 letters were selected", section 3.1, paragraph 1).

However, ESQUERRA does not disclose reading a vocabulary data, reading a set of one or more desired phonemes, searching the vocabulary data for one or more words having the set of one or more desired phonemes, or generating a report of one or more additional words having the set of one or more desired phonemes.

In the same field of phonetic evaluation, ESSEX teaches:

reading a vocabulary data having one or more words ("word database", see header);

reading a set of one or more desired phonemes (three different phonemes may be selected with the pull-down menus);

searching the vocabulary data for one or more words having the set of one or more desired phonemes ("search for words which contain the following phonemes");

generating a report of one or more additional words having the set of one or

more desired phonemes ("generates a list of words"), if the one or more additional

words having the set of one or more desired phonemes are included in the vocabulary

data (see "Phoneme Search Results").

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made use the phoneme search engine of ESSEX with the

corpus design of ESQUERRA in order to find words containing "missing units" (ESSEX,

section 5, paragraph 1).

Conclusion

26.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. A list of pertinent prior art can be found on the included form

PTO-892.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joel Stoffregen whose telephone number is (571) 270-

1454. The examiner can normally be reached on Monday - Friday, 9:00 a.m. - 6:30
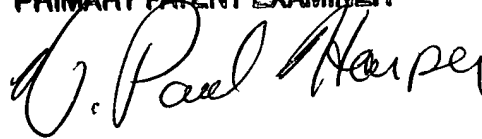
p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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